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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,523	07/19/2004	Chin-Shuang Liu	IEIP0015USA	4522
27765	7590	06/14/2007		
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER GUILL, RUSSELL L	
			ART UNIT 2123	PAPER NUMBER
			NOTIFICATION DATE 06/14/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/710,523	Applicant(s) LIU, CHIN-SHUANG	
	Examiner Russ Guill	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 20 have been examined. Claims 1 – 20 have been rejected.
2. The Examiner would like to thank the Applicant for presenting claims that have no antecedent basis issues, which was useful in the examination process.

Specification

3. The disclosure is objected to because of the following informalities:
 - a. Paragraphs [0008], [0017] and [0036] recite, "UNIX" and WINDOWS which appear to be trademarks. The trademarks should be accompanied with a trademark symbol ®.
 - b. Paragraph [0018] recites, "ACTIVEX", which appears to be a trademark. The trademark should be accompanied with a trademark symbol ®.
 - c. Paragraph [0019] recites, "Linux", which appears to be a trademark. The trademark should be accompanied with a trademark symbol ®.
 - d. Paragraph [0019] recites, "AMR", which appears to be a trademark. The trademark should be accompanied with a trademark symbol ®.

Claim Objections

4. Claim 17 is objected to because of the following informalities: The claim recites in line 9, "transmitting the data in network packet to the remote computer system". The phrase appears to have a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

a. **Claims 1 - 7 and 9** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. One reasonably skilled in the art could not make or use the invention from the disclosure in the specification, coupled with information known in the art, without undue experimentation, for the following reasons:

- i. Claim 1 recites in lines 7 - 9, "a serial signal interface electrically connected to the remote computer system for transmitting the data in serial signal form". The specification appears to describe a serial signal interface electrically connected to the host system, and provides no direction and guidance on how to make the claimed invention.
- ii. Claim 9 recites in lines 3 - 5, "a serial signal interface electrically connected to the remote computer system for transmitting the data in serial signal form". The specification appears to describe a serial signal interface electrically connected to the host system, and provides no direction and guidance on how to make the claimed invention.
- iii. **Claims 2 - 7** are rejected based on their dependency on their respective intermediate and parent claims which are rejected under 35 U.S.C. 112, first paragraph.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

a. Claims 1 - 10, 12, 13, 15, 17 - 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- i. Regarding claim 3, the claim recites, "ACTIVEX". "ACTIVEX" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- ii. Regarding claim 6, the claim recites, "Linux". "Linux" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- iii. Regarding claim 8, the claim recites, "UNIX". "UNIX" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- iv. Regarding claim 8, the claim recites, "WINDOWS". "WINDOWS" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- v. Regarding claim 10, the claim recites, "ACTIVEX". "ACTIVEX" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.

- vi. Regarding claim 12, the claim recites, "UNIX". "UNIX" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- vii. Regarding claim 13, the claim recites, "WINDOWS". "WINDOWS" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- viii. Regarding claim 15, the claim recites, "ACTIVEX". "ACTIVEX" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- ix. Regarding claim 19, the claim recites, "ACTIVEX". "ACTIVEX" appears to be a trademark. The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.
- x. Regarding claim 1, the claim recites in lines 1 - 2, "timely presenting data". The term "timely" is a relative term which renders the claim indefinite. The term "timely" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
- xi. Regarding claim 8, the claim recites in line 5, "timely presenting data". The term "timely" is a relative term which renders the claim indefinite. The term "timely" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one

of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

xii. Regarding claim 17, the claim recites in line 1, "timely presenting data". The term "timely" is a relative term which renders the claim indefinite. The term "timely" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

xiii. Regarding claim 1, the claim recites in lines 12 - 13, "a converting unit for converting data between serial signal form and network packet form". The limitation appears to be disconnected from the remainder of the claim, such that an essential element appears to be omitted, amounting to a gap between the elements. The claim does not appear to convert the data in the preceding limitations from serial to network packet form.

b. Claims 2, 4 - 5, 7, 9, 18 and 20 are rejected based on their dependency on their respective intermediate and parent claims which are rejected under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 - 2, 4 - 5, 8 - 9, 11, 13 - 14, 16 - 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton (Peter Norton et al.; "Complete Guide to Windows NT Workstation 4", 1999 edition, 1999, SAMS) in view of BlackBox (Black Box Corporation, "The Compact Single-Port Terminal Server User's Guide", 2002).

a. The art of BlackBox is directed to a description of a telecommunications device to convert between RS-232 signals and a TCP/IP-based Ethernet signal (page 1).

b. The art of Norton is directed to a guide to using Windows NT (Title).

c. The art of BlackBox and the art of Norton are analogous art because they both contain the art of TELNET (BlackBox, page 12; Norton, page 692).

d. Regarding claim 1:

e. Norton appears to teach:

f. a terminal emulation unit installed inside the remote computer system for presenting the data in serial signal form on the terminal of the remote computer system according to a terminal emulation method so as to provide a remote-control function when the remote computer system receives the data in network packet form from the host system via the network system (pages 692 - 693, section "Using the Telnet Utility"; it would have been obvious that the Telnet terminal emulator was connected to a network because on page 693, figure 23.22, the user enters a name or address of a host to connect to, which is obviously a network name or address).

g. Norton does not specifically teach:

h. an information converting apparatus comprising: a serial signal interface electrically connected to the remote computer system for transmitting the data in serial signal form;

i. a network interface electrically connected to the network system for transmitting network packets; and

j. a converting unit for converting data between serial signal form and network packet form;

k. BlackBox appears to teach:

l. an information converting apparatus comprising: a serial signal interface electrically connected to the remote computer system for transmitting the data in serial signal form (page 1 and figure 1);

m. a network interface electrically connected to the network system for transmitting network packets (page 1 and figure 1);

n. a converting unit for converting data between serial signal form and network packet form (page 1 and figure 1);

o. The motivation to use the art of BlackBox with the art of Norton would have been the benefit recited in BlackBox that the device can network-enable a serial device by connecting a serial device, that does not have a network port, to a network so that the device can be monitored and controlled remotely (page 1), which would have been recognized as a benefit by the ordinary artisan.

p. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of BlackBox with the art of Norton to produce the claimed invention.

q. Regarding **claim 2**:

r. Norton appears to teach:

s. a link unit installed inside the remote computer system and electrically connected to the terminal emulation unit for transferring the data obtained from the host system via the network system from the network interface to the terminal emulation unit for terminal emulation processing (pages 692 - 693, section "Using the Telnet Utility"; it would have been obvious that the Telnet terminal emulator was connected to a network because on page 693, figure 23.22, the user enters a name or address of a host to connect to, which is obviously a network name

or address, and further, it would have been obvious that a link unit was installed inside the remote computer system because the ordinary artisan would have known that a computer using a network connection had a protocol stack such as a TCP/IP stack of software to transfer data from the network to an application, such as a terminal emulator).

t. Regarding **claim 4**:

u. Norton does not specifically teach:

v. the serial signal interface of the information converting apparatus is an RS-232 interface.

w. BlackBox appears to teach:

x. the serial signal interface of the information converting apparatus is an RS-232 interface (page 1).

y. Regarding **claim 5**:

z. Norton does not specifically teach:

aa. the converting unit of the information converting apparatus includes a control unit and a memory with an embedded firmware for converting data between serial form and network packet form.

bb. BlackBox appears to teach:

cc. the converting unit of the information converting apparatus includes a control unit and a memory with an embedded firmware for converting data between serial form and network packet form (page 1, and page 2, HARDWARE COMPONENTS, Motorola 12 MHz 68HC000 CPU and 256K bytes of EPROM).

dd. Regarding **claim 8**:

ee. Norton appears to teach:

ff. a terminal emulation unit installed inside the remote computer system for presenting the data outputted from the host system on the terminal of the remote computer system according to a terminal emulation method so as to provide a remote-control function when the

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remote computer system receives the data in network packet form from the host system via the network system (pages 692 - 693, section "Using the Telnet Utility"; it would have been obvious that the Telnet terminal emulator was connected to a network because on page 693, figure 23.22, the user enters a name or address of a host to connect to, which is obviously a network name or address);

gg. a link unit installed inside the remote computer system and electrically connected to the terminal emulation unit for transferring the data obtained from the host system from the network system to the terminal emulation unit for terminal emulation processing (pages 692 - 693, section "Using the Telnet Utility"; it would have been obvious that the Telnet terminal emulator was connected to a network because on page 693, figure 23.22, the user enters a name or address of a host to connect to, which is obviously a network name or address, and further, it would have been obvious that a link unit was installed inside the remote computer system because the ordinary artisan would have known that a computer using a network connection had a protocol stack such as a TCP/IP stack of software to transfer data from the network to an application, such as a terminal emulator).

hh. Norton does not specifically teach:

ii. an information converting apparatus for converting the data outputted from the host system into network packets to be transmitted on the network system;

jj. BlackBox appears to teach:

kk. an information converting apparatus for converting the data outputted from the host system into network packets to be transmitted on the network system (page 1);

ll. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of BlackBox with the art of Norton to produce the claimed invention.

mm. Regarding claim 9:

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nn. Norton does not specifically teach:

oo. the information converting apparatus comprises: a serial signal interface electrically connected to the remote computer system for transmitting the data in serial signal form;

pp. a network interface electrically connected to the network system for transmitting the data in network packet form;

qq. a converting unit for converting data between serial signal form and network packet form.

rr. BlackBox appears to teach:

ss. the information converting apparatus comprises: a serial signal interface electrically connected to the remote computer system for transmitting the data in serial signal form (page 1);

tt. a network interface electrically connected to the network system for transmitting the data in network packet form (page 1);

uu. a converting unit for converting data between serial signal form and network packet form (page 1).

vv. Regarding claim 11:

ww. Norton appears to teach:

xx. inputting at least one data into the remote computer system; utilizing a terminal emulation unit of the remote computer system to present the data on a terminal of the remote computer system (pages 692 - 693);

yy. Norton does not specifically teach:

zz. transmitting the data in network packet form to an information converting apparatus via a network system;

aaa. utilizing the information converting apparatus to convert the data in network packet form into serial signal form so as to transmit the data in serial signal form to the host system;

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bbb. utilizing the host system to process the data in serial signal form.

ccc. BlackBox appears to teach:

ddd. transmitting the data in network packet form to an information converting apparatus via a network system (page 1);

eee. utilizing the information converting apparatus to convert the data in network packet form into serial signal form so as to transmit the data in serial signal form to the host system (page 1);

fff. utilizing the host system to process the data in serial signal form (page 1).

ggg. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of BlackBox with the art of Norton to produce the claimed invention.

hhh. Regarding **claim 13**:

iii. Norton appears to teach:

jjj. the remote computer system comprises an operating system compatible with a WINDOWS operating system (title of reference), and an input device for allowing a user to input data (pages 692 - 693; it would have been obvious that data input to Telnet was from an input device).

kkk. Regarding **claim 14**:

lll. Norton appears to teach:

mmm. the remote computer system comprises a network interface ~~corresponding with a TCP/IP protocol and~~ electrically connected to the network system for transmitting the data in network packet form (pages 692 - 693, section "Using the Telnet Utility"; it would have been obvious that the computer was electrically connected to a network because figure 23.22 allows the user to enter an address or host to connect to, which would have obviously been a network address).

nnn. Norton does not specifically teach (in **bold italic underline**):

ooo. the remote computer system comprises a network interface **corresponding with a TCP/IP protocol** and electrically connected to the network system for transmitting the data in network packet form.

ppp. BlackBox appears to teach:

qqq. a network interface **corresponding with a TCP/IP protocol** (page 1, TCP/IP).

rrr. Regarding claim 16:

sss. Norton does not specifically teach:

ttt. the information converting apparatus further comprises a serial signal interface electrically connected to the host system for transmitting the data in serial signal form, a network interface electrically connected to the network system for transmitting the data in network packet form, and a converting unit for converting data between serial signal form and network packet form.

uuu. BlackBox appears to teach:

vvv. the information converting apparatus further comprises a serial signal interface electrically connected to the host system for transmitting the data in serial signal form, a network interface electrically connected to the network system for transmitting the data in network packet form, and a converting unit for converting data between serial signal form and network packet form (page 1).

www. Regarding claim 17:

xxx. Norton appears to teach:

yyy. utilizing a link unit of the remote computer system to transmit the data to a terminal emulation unit (pages 692 - 693, section "Using the Telnet Utility"; it would have been obvious that the Telnet terminal emulator was connected to a network because on page 693, figure 23.22, the user enters a name or address of a host to connect

to, which is obviously a network name or address, and further, it would have been obvious that a link unit was installed inside the remote computer system because the ordinary artisan would have known that a computer using a network connection had a protocol stack such as a TCP/IP stack of software to transfer data from the network to an application, such as a terminal emulator).

zzz. utilizing the terminal emulation unit to process the data according to a terminal emulation method and transmitting the data processed by the terminal emulation unit to the terminal of the remote computer system so as to present a virtual image (pages 692 - 693, section "Using the Telnet Utility");

aaaa. Norton does not specifically teach:

bbbb. utilizing the host system to output data in serial signal form;

cccc. utilizing an information converting apparatus to convert the data in serial signal form into network packet form and transmitting the data in network packet to the remote computer system via the network system;

dddd. BlackBox appears to teach:

eeee. utilizing the host system to output data in serial signal form (page 1);

ffff. utilizing an information converting apparatus to convert the data in serial signal form into network packet form and transmitting the data in network packet to the remote computer system via the network system; (page 1).

gggg. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of BlackBox with the art of Norton to produce the claimed invention.

hhhh. Regarding claim 18:

iiii. Norton appears to teach:

jjjj. the remote computer system comprises a network interface ~~corresponding with a TCP/IP protocol~~ and electrically connected to the network system for transmitting the data in network packet form (pages 692 - 693, section "Using the Telnet Utility"; it would have been obvious that the computer was electrically connected to a network because figure 23.22 allows the user to enter an address or host to connect to, which would have obviously been a network address).

kkkk. Norton does not specifically teach (in ***bold italic underline***):

llll. the remote computer system comprises a network interface corresponding with a TCP/IP protocol and electrically connected to the network system for transmitting the data in network packet form.

mmmm. BlackBox appears to teach:

nnnn. a network interface corresponding with a TCP/IP protocol (page 1, TCP/IP).

oooo. Regarding **claim 20**:

pppp. Norton does not specifically teach:

qqqq. a serial signal interface electrically connected to the host system for transmitting the data in serial signal form, a network interface electrically connected to the network system for transmitting the data in network packet form, and a converting unit for converting data between serial signal form and network packet form.

rrrr. BlackBox appears to teach:

ssss. a serial signal interface electrically connected to the host system for transmitting the data in serial signal form, a network interface electrically connected to the network system for transmitting the data in network packet form, and a converting unit for converting data between serial signal form and network packet form (page 1).

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9. **Claims 6 and 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Norton as modified by BlackBox as applied to claims **1 - 2, 4 - 5, 8 - 9, 11, 13 - 14, 16 - 18 and 20** above, further in view of Stallings (William Stallings, "Operating Systems: Internals and Design Principles", third edition, 1998, Prentice-Hall).

- a. Norton as modified by BlackBox teaches a method and system for presenting data in serial form sent from a host system to a terminal of a remote computer system via a network system as recited in claims **1 - 2, 4 - 5, 8 - 9, 11, 13 - 14, 16 - 18 and 20** above.
- b. The art of Stallings is directed to the design principles of operating systems (Title).
- c. The art of Stallings and the art of Norton as modified by BlackBox are analogous art because they both contain the art of operating systems (Norton, title; Stallings, title).
- d. The motivation to use the art of Stallings with the art of Norton as modified by BlackBox would have been the knowledge of the ordinary artisan that UNIX was a modern important operating system (Stallings, pages 89 - 90, section "System V Release 4 (SVR4)").
- e. Regarding **claim 12**:
- f. Norton does not specifically teach:
 - g. the host system comprises an operating system compatible with a UNIX operating system, and an RS-232 interface electrically connected to the information converting apparatus for transmitting the data in serial signal from.
- h. BlackBox appears to teach:
 - i. an RS-232 interface electrically connected to the information converting apparatus for transmitting the data in serial signal from (page 1).
- j. Stallings appears to teach:

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k. the host system comprises an operating system compatible with a UNIX operating system (pages 88 - 90).

l. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Stallings with the art of Norton as modified by BlackBox to produce the claimed invention.

m. Regarding **claim 6**:

n. Norton does not specifically teach:

o. the converting unit comprises an operating system (OS) compatible with a Linux operating system.

p. Stallings appears to teach:

q. the converting unit comprises an operating system (OS) compatible with a Linux operating system (pages 88 - 90; it would have been obvious that Unix was compatible with Linux).

10. Claims 3, 10, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton as modified by BlackBox as applied to claims **1 - 2, 4 - 5, 8 - 9, 11, 13 - 14, 16 - 18 and 20** above, further in view of Austin (U.S. Patent Number 6,370,569).

a. Norton as modified by BlackBox teaches a method and system for presenting data in serial form sent from a host system to a terminal of a remote computer system via a network system as recited in claims **1 - 2, 4 - 5, 8 - 9, 11, 13 - 14, 16 - 18 and 20** above.

b. The art of Austin is directed to a data socket client and associated applications and/or tools which provide programs with access to data from various sources (Abstract).

c. The art of Austin and the art of Norton as modified by BlackBox are analogous art because they both are pertinent to the art of computer network communications (*BlackBox, page 1; Austin, figure 1*).

d. Regarding claims 3, 10 and 19:

e. Norton does not specifically teach:

f. the link unit is a socket designed with an ACTIVEX package.

g. Austin appears to teach:

h. the link unit is a socket designed with an ACTIVEX package (column 9, lines 35 - 65).

i. The motivation to use the art of Austin with the art of Norton as modified by BlackBox would have been the benefit recited in Austin: The Data Socket client thus provides a new technology and tools that greatly simplify sharing data, such as engineering and scientific data, between different applications or application components. The Data Socket client provides improved sharing of data between components running on the same computer or between different computers on a network (column 4, lines 17 - 25).

j. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Austin with the art of Norton as modified by BlackBox to produce the claimed invention.

k. Regarding claim 15:

l. Norton appears to teach:

m. utilizing a link unit connected to the terminal emulation unit for transferring the data from the terminal emulation unit to the network system, ~~wherein the link unit is a socket designed with an ACTIVEX package.~~

n. Norton does not specifically teach (in ***bold italic underline***):

o. utilizing a link unit connected to the terminal emulation unit for transferring the data from the terminal emulation unit to the network

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system, wherein the link unit is a socket designed with an ACTIVEX package.

p. Austin appears to teach:

q. the link unit is a socket designed with an ACTIVEX package (column 9, lines 35 - 65).

11. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Norton as modified by BlackBox as applied to claims 1 - 2, 4 - 5, 8 - 9, 11, 13 - 14, 16 - 18 and 20 above, further in view of Tanenbaum (Andrew S. Tanenbaum, "Computer Networks", third edition, 1996, Prentice-Hall).

a. Norton as modified by BlackBox teaches a method and system for presenting data in serial form sent from a host system to a terminal of a remote computer system via a network system as recited in claims 1 - 2, 4 - 5, 8 - 9, 11, 13 - 14, 16 - 18 and 20 above.

b. The art of Tanenbaum is directed to computer networks (title).

c. The art of Tanenbaum and the art of Norton as modified by BlackBox are analogous art because they both contain the art of computer networks (BlackBox, page 1; Tanenbaum, Title).

d. The motivation to use the art of Tanenbaum with the art of Norton as modified by BlackBox would have been the knowledge of the ordinary artisan that encryption was often useful to protect data (Tanenbaum, page 579, sixth paragraph that starts with, "In the data link layer . . .", last sentence; and pages 577 - 578).

e. Regarding **claim 7**:

f. Norton does not specifically teach:

g. the converting unit comprises a crypto-module for encrypting and decrypting data transmitted between the host system and the remote computer system.

h. Tanenbaum appears to teach:

i. the converting unit comprises a crypto-module for encrypting and decrypting data transmitted between the host system and the remote computer system (*Tanenbaum, page 579, sixth paragraph that starts with, "In the data link layer . . .", last sentence; and pages 577 - 578*).

j. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Tanenbaum with the art of Norton as modified by BlackBox to produce the claimed invention.

12. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. The entire reference is considered to provide disclosure relating to the claimed invention.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure:

- a. "Project: Socket Controls", two web pages of ActiveX® Socket Controls dated September 1, 2003; teaches ActiveX® controls using sockets.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russ Guill whose telephone number is 571-272-7955.

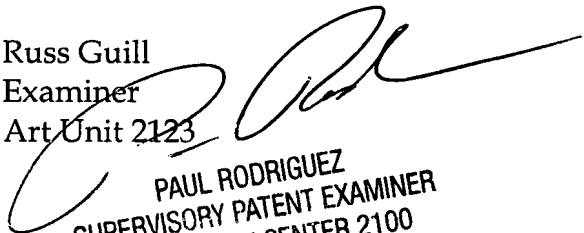
The examiner can normally be reached on Monday - Friday 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG

Russ Guill
Examiner
Art Unit 2123


PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100